

Ellanor C. Lawrence Park

Teacher's Outline

Program: Soil and Water

Grade: 3

Program Objectives

- To help students discover the importance of soil and water
- To introduce the water cycle through an interactive demonstration
- To explore the effects of erosion

Program length

1 hour

Program content

- Introduction of staff and park
- Discussion of soil and water as part of the forest ecosystem
- Guided hike to examine and explore the soil, the rocks from which it formed, and a stop at the stream to see the effects of erosion from water. Discuss the effects of erosion. Discuss ways that humans can contribute to and combat soil erosion
- A stop at the park's compost bins to discuss how humans can improve the soil using biodegradable waste products
- Conclusion

Terms to understand

- *Evaporation*: to change a liquid or solid into a vapor
- *Transpiration*: giving off moisture (e.g. through leaf surfaces)
- *Condensation*: turning from gas to liquid
- *Precipitation*: a depositing of rain, sleet, snow, etc
- *Humus*: plant and animal decay
- *Organic Material*: once-living material in the soil

This program complements the following SOL's

3.7 "the student will investigate and understand the major components of soil, its origin, and importance to plants and animals including humans. Key concepts include:

- Soil provides the support and nutrients necessary for plant growth;
- Topsoil is a natural product of subsoil and bedrock;
- Rock, clay, silt, and humus are components of soils;
- Soil is a natural resource that should be conserved"

3.9 “the student will investigate and understand the water cycle and its relationship to life on Earth. Key concepts include:

- The origin of energy that drives the water cycle
- Processes involved in the water cycle (evaporation, condensation, precipitation)
- Water supply and water conservation”